

# Low Pass Filter

DC to 2000 MHz

## Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
RF Power Input*	9W max. at 25°C
DC Current Input to Output	1A max. at 25°C

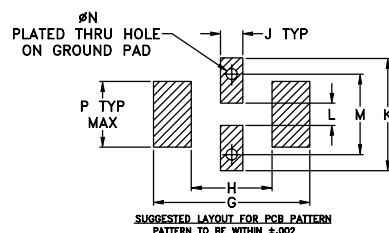
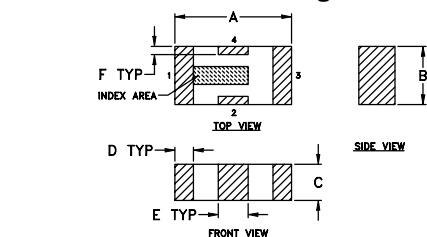
\*Passband rating, derate linearly to 4W at 100°C ambient.

## Pin Connections

RF IN	1**
RF OUT	3**
GROUND	2,4

\*\*RF IN & RF OUT can be interchanged

## Outline Drawing



SUGGESTED LAYOUT FOR PCB PATTERN  
PATTERN TO BE WITHIN ±.002

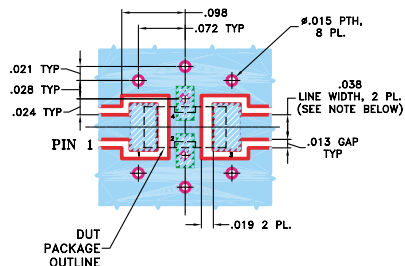
TOLERANCE UNLESS OTHERWISE STATED

2 PLACE DECIMALS: ±.01  
3 PLACE DECIMALS: ±.005

## Outline Dimensions (inch)

A	B	C	D	E	F	G	H
.126	.063	.039	.020	.032	.009	.169	.087
3.20	1.60	0.99	0.51	0.81	0.23	4.29	2.21
J	K	L	M	N	P	wt.	
.024	.122	.024	.087	.012	.071	grams	
0.61	3.10	0.61	2.21	0.30	1.80	.020	

Demo Board MCL P/N: TB-270  
Suggested PCB Layout (PL-137)



NOTE: 1. TRACE WIDTH IS SHOWN FOR ROGERS RO4350, WITH DIELECTRIC THICKNESS .020" ± .0015". COPPER: 1/2 OZ. EACH SIDE. FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.  
2. BOTTOM SIDE OF THE PCB IS CONTINUOUS GROUND PLANE.

■ DENOTES PCB COPPER LAYOUT  
■ DENOTES COPPER LAND PATTERN FREE OF SOLDERMASK

## Features

- excellent power handling, 9W
- small size
- 5 sections
- temperature stable
- patent pending

## Applications

- harmonic rejection
- VHF/UHF transmitters/receivers
- lab use

**NEW!**  
LFCN-2400



**BLUE CELL™**

CASE STYLE: FV1206

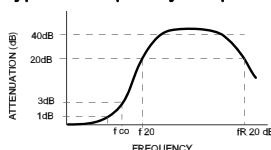
Model	Price	Qty.
LFCN-2400	\$1.99	(10-49)
LFCN-2400D	\$2.49	(10-49)

## Low Pass Filter Electrical Specifications<sup>1</sup> (T<sub>AMB</sub>=25°C)

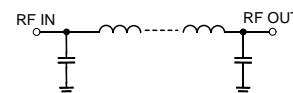
MODEL NO.	PASSBAND (MHz) (loss < 1.5 dB) Max.	f <sub>co</sub> , MHz Nom. (loss 3 dB) Typ.	STOP BAND (MHz) (loss, dB)			VSWR (:1)		NO. OF SECTIONS
			f 20 Min.	30 Typ.	f <sub>r</sub> 20 Typ.	Stopband Typ.	Passband Typ.	
LFCN-2400	DC-2400	2800	3600	3700-4000	5000	20	1.2	5

1. For Applications requiring DC voltage to be applied to the Input or output, use LFCN-2400D (DC Resistance to ground is 100 Mohms min.)

## typical frequency response

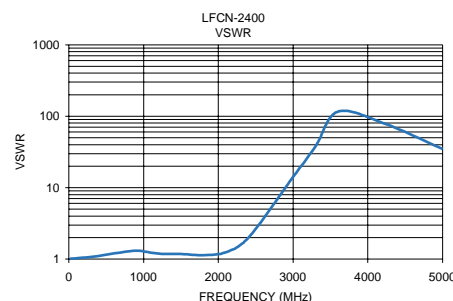
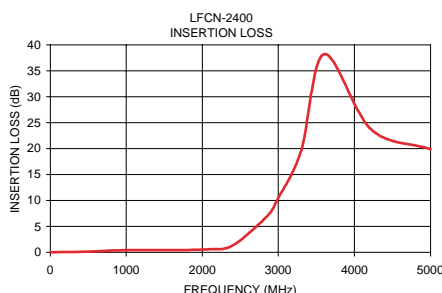


## schematic



## Typical Performance Data at 25°C

Frequency (MHz)	Insertion Loss (dB)	VSWR (:1)
10.00	0.03	1.01
308.75	0.10	1.07
607.50	0.20	1.20
906.25	0.39	1.31
1205.00	0.41	1.19
1503.75	0.41	1.17
1802.50	0.46	1.13
2101.25	0.62	1.25
2400.00	1.34	1.97
2850.00	6.94	8.51
3000.00	10.53	14.15
3300.00	19.58	37.77
3600.00	38.18	115.81
4222.22	23.66	78.97
5000.00	19.90	34.75



designers kit available

Kit No.	No. of Units in Kit	Description	Price \$ per Kit
K2-LFCN	60	5 of each: LFCN-800,-900,-1000,-1200,-1325,-1700,-2000,-2250,-2400,-5000,-6000,-6700	119.95

**Mini-Circuits®**

Distribution Centers NORTH AMERICA 800-654-7949 • 417-335-5935 • Fax 417-335-5945 • EUROPE 44-1252-832600 • Fax 44-1252-837010

Mini-Circuits ISO 9001 & ISO 14001 Certified

INTERNET <http://www.minicircuits.com>

P.O. Box 350166, Brooklyn, New York 11235-0003 (718) 934-4500 Fax (718) 332-4661

REV. F  
M96263  
LFCN-2400  
ED-9913/5  
AD/RS/CP  
050113